

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010407**Date Inspected:** 25-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wang Chung Ging**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG/TOWER**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

HEAVY DOCK

ULTRASONIC INSPECTION

OBG SEGMENT 3EAST

This Quality Assurance (QA) Inspector performed conventional UT (Ultrasonic Testing) in conjunction with ABF Ultrasonic Testing (UT) department for detection of planar transverse indication.

Ultrasonic Testing (UT) performed on repair areas of the weld between side panel and bottom panel (cross beam side) of OBG segment 3 East (SEG016A-007) utilizing scanning pattern A, B, C and D (Fig 6.7). During the ultrasonic inspection this Quality Assurance (QA) Inspector found 1 transverse indication that had not identified by ABF.

See Caltrans Ultrasonic Transverse Indication Evaluation sheet dated 11/25/2009 for further information on inspections.

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TRIAL ASSEMBLY YARD

MAGNETIC PARTICLE INSPECTION

OBG SEGMENT 1AAW-1AW

This Quality Assurance (QA) Inspector performed Magnetic Particle Inspection in conjunction with ABF Magnetic Particle Inspection department.

Magnetic Particle Inspection was performed on repair areas of the side panel (cross beam side) splice weld between OBG segment 1AAW and 1AW (OBW1A-004, 005).

BAY #10

This QA Inspector randomly observed the following work in progress.

NORTH TOWER LIFT #4

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 052075 performing Flux Cored Arc Welding process for the weld NSTL4-3C/L-139 located on PCMK North tower lift #4. ZPMC QC Mr. Wang Chung Ging monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4332-TC-P5-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 054069 performing Flux Cored Arc Welding process for the weld NSTL4-3C/L-155 located on PCMK North tower lift #4. ZPMC QC Mr. Wang Chung Ging monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4332-TC-P5-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 050041 performing Flux Cored Arc Welding process for the weld NSTL4-3H/L-12 located on PCMK North tower lift #4. ZPMC QC Mr. Wang Chung Ging monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4332-TC-P5-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 053116 performing Flux Cored Arc Welding process for the weld NSTL4-3H/L-131 located on PCMK North tower lift #4. ZPMC QC Mr. Wang Chung Ging monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4332-TC-P5-F.

BLASTING SHOP

VISUAL INSPECTION

OBG SEGMENT 7DE

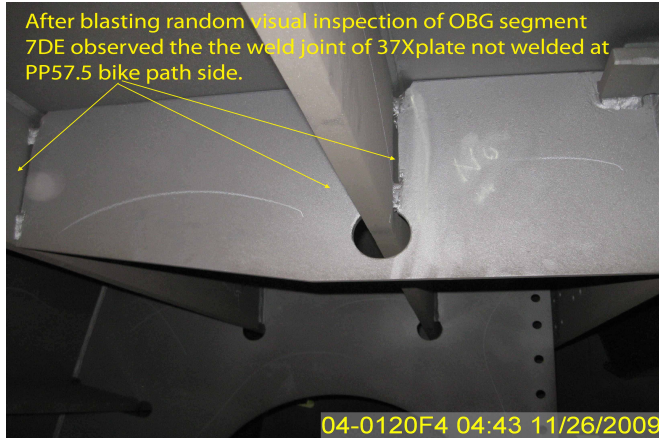
This Quality Assurance (QA) Inspector performed random visual inspection after blasting along with Caltrans Quality Assurance (QA) Inspector Mr. Paul Dawson on inside upper panel, floor beam and inside corner assembly diaphragm of OBG segment 7DE. During the inspection we found normal minor gouges, arc strikes, spatter,

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undercut. The major item was ZPMC did not weld the weld joint of 37X plate with deck panel I rib at PP57.5 (bike path side). See attached photos for additional information.

Unless otherwise noted, all work observed on this dated appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang +(86) 150.0042.2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Dawson,Paul	QA Reviewer
